DOCUMENT RESUME

ED 160 891 08 CE 018 406

AUTHOR Hughes, James H.; Rice, Eric
TITLE Needs Assessment Procedure: Mainstreaming Handicapped. Volume I. Final Technical Report.
INSTITUTION System Sciences, Inc., Chapel Hill, N.C.
SPONS AGENCY Bureau of Occupational and Adult Education (DHEW/OE), Washington, D.C. Div. of Research and Demonstration.
BUREAU NO 498AH70191
PUB DATE May 78
CONTRACT G0077C0070
NOTE 18p.; For a related document see CE 018 407

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Administrator Guides; Decision Making; Educational Strategies; Evaluation Methods; *Handicapped Children; *Mainstreaming; Material Development; *Needs Assessment; Program Evaluation; *Program Planning; *Vocational Education

ABSTRACT

The design and development of a needs assessment procedure to assist local vocational education administrators in planning a mainstreaming approach for handicapped students in vocational education was the purpose of this study. The methodology involved a review of the literature on the general mainstreaming topic, program planning, needs assessment procedures, barrier identification and analysis, program evaluation, mainstreaming handicapped in vocational education, and related areas and issues. Also, interviews were conducted with special education directors in five school systems. From the studies and reports reviewed, a procedure was designed and developed. It is conceptually based on a program planning and evaluation model with four components: (1) needs assessment and barriers identification; (2) development of strategies to meet needs and overcome barriers; (3) implementation of planned strategies, and (4) evaluation. The procedure features the nominal group process technique in the needs assessment and barriers identification phase, and the force field analysis technique in the development and selection of alternative strategies. An administrator's manual was prepared to guide application of the needs assessment and planning procedure at the local education agency level. (It is available as CE 018 406, Volume II of this two-volumed report.) (Author/JH)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED160891

FINAL REPORT

Project No. 498AH70191
Contract No. G0077C0070

James H. Hughes and Eric Rice
System Sciences, Inc.
P.O. Box 2345
Chapel Hill, North Carolina 27514

# NEEDS ASSESSMENT PROCEDURE: MAINSTREAMING HANDICAPPED

Volume I, Final Technical Report

May 1978

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

U.S. Department of Health, Education and Welfare
Office of Education
Bureau of Occpupational and Adult Education
Division of Research and Demonstration

CE 018 406

## AUTHORS' ABSTRACT

The purpose of this study was the design and development of a needs assessment procedure to assist local vocational education administrators in planning an implementation of the mainstreaming approach for serving handicapped students in vocational education.

The research methodology involved review of literature on: (1) the general mainstreaming topic, (2) program planning, (3) needs assessment procedures, (4) barrier identification and analysis, (5) program evaluation, (6) mainstreaming handicapped in vocational education, and (7) related areas and issues. From the studies and reports reviewed, project staff designed and developed the procedure.

The procedure is conceptually based on a program planning and evaluation model with four components: (1) needs assessment and barriers identification, (2) development of strategies to meet needs and overcome barriers, (3) implementation of planned strategies, and (4) evaluation. The procedure features (a) the Nominal Group Process technique in the needs assessment and barriers identification phase, and (b) the Force Field Analysis technique in the development and selection of alternative strategies. Specific instructions are provided for the formation, composition and utilization of a local planning committee to assist the local vocational education administrator in planning for and undertaking the implementation of a mainstreaming approach. A list of available resources is also provided.

The procedure has been fully described in Volume II, Mainstreaming the Handicapped: A Needs Assessment and Program Planning Procedure, A Manual for Vocational Education Administrators.

System Sciences, Inc.

P.O. Box 2345
Chapel Hill, North Carolina 27514

Chapel Hill 919: 929-7116
Durham 919: 286-0711

Final Report

Project No. 498AH70191
Contract No. G0077C0070

# NEEDS ASSESSMENT PROCEDURE: MAINSTREAMING HANDICAPPED

Volume I, Final Technical Report

James H. Hughes and Eric Rice
System Sciences, Inc.
Chapel Hill, North Carolina

May 1978

The research reported herein was performed pursuant to a contract with the U.S. Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. Department of Health, Education, and Welfare
Office of Education
Bureau of Occupational and Adult Education

## PREFACE

In the past, vocational education programs for the handicapped have been limited both by the extent of programming available and by the type of programs which have served the handicapped. There have been insufficient numbers of available programs, and of those that have been offered, a majority have been segregated programs, serving the handicapped in settings separated from regular programs. Recent federal and state legislation mandates that free, appropriate, public education be provided for the handicapped in the least restrictive environment. As a result of this legislation, the "mainstreaming" of handicapped students in vocational education (the integration, where appropriate, of handicapped youngsters into regular vocational education programs) will receive much more attention. Implementation of the mainstreaming approach, however, will require careful planning and skillful administration. This project has developed a procedure to assist local administrators in implementing mainstreaming.

The project would not have been possible without the assistance and encouragement of a number of individuals and agencies. The cooperation and support of the Division of Vocational Education, North Carolina State Department of Public Instruction, is gratefully acknowledged. Dr. Charles J. Law, Jr., Division Director, and Mr. Jim Lunsford, then the Division's Chief Consultant for the Disadvantaged and Handicapped, provided support and encouragement in the initial development of the project.

The assistance of Dr. James L. Paul, University of North Carolina at Chapel Hill, who served as a consultant to the project was most helpful. Dr. Paul assisted in the early conceptualization and planning of the project, and in reviewing the draft final report. Ms. Genevieve Ortman, a doctoral student in special education at UNC-CH, provided consultation and technical assistance in conducting a special survey of local directors of special education. The survey examined the issue of cooperation between special education and vocational education.

Dr. Stuart E. Schwartz, University of Florida, was most gracious in allowing us to include one of five booklets from the "Another Step Forward" series developed by the University of Florida Department of Special Education as an appendix to Volume II of the report.

Dr. Jack A. Wilson in the Research Branch, Division of Research and Demonstration, Bureau of Occupational and Adult Education, U.S. Office of Education, served as the Project Officer. His support and assistance throughout the project period are acknowledged.

Our associates at System Sciences, Inc. must also be mentioned for their helpful support. Dr. Edgar A. Parsons provided project management support and reviewed final draft reports. Ms. Doris M. Lange provided efficient and competent assistance in the preparation of the final project report.

TABLE OF CONTENTS


| | | Page |
|---|---|---|
| | Preface | ii |
| I. | Introduction | 1 |
| | Legislative Background | 1 |
| | The Mainstreaming Approach | 2 |
| | Objectives | 3 |
| II. | Procedures | 4 |
| | Assumptions | 4 |
| | Review of Related Literature | 4 |
| | Survey of Special Education Directors | 5 |
| | Compilation of Available Resources | 6 |
| III. | Results | 7 |
| IV. | Conclusions | 10 |
| | Bibliography | 11 |

# I. INTRODUCTION

This project addressed the priority research area of "administration of vocational education at the local level," as announced by the Bureau of Occupational and Adult Education, Division of Research and Demonstration, for research projects in Vocational Education, Fiscal Year 1977.

The project involved the design and development of a needs assessment and planning procedure for use by local vocational education administrators in planning and developing strategies for mainstreaming handicapped students.

## Legislative Background

Recent federal and state legislation have required the provision of equal educational opportunities for the handicapped. A key concept arising from these legislative mandates has been the "least restrictive alternative" requirement for educational placement of the handicapped. Implementation of this concept has led many educators to consider mainstreaming as a viable option in the delivery of educational services to the handicapped.

Public Law 94-142, the Education of All Handicapped Children Act of 1975, impacts on vocational education in several ways.

The major purpose of P.L. 94-142 is to assure that all handicapped students have available to them a free appropriate public education. The term, "free appropriate public education," as used in P.L. 94-142 means special education and related services which (a) have been provided at public expense under public supervision and direction and without charge, (b) meet the standards of the state educational agency, (c) include an appropriate preschool, elementary, or secondary school education in the state involved, and (d) are provided in conformity with an individualized education program.

P.L. 94-142 includes, among its provisions, the following: (1) that if the Commissioner of Education finds substantial noncompliance with the various provisions of the Act, he shall terminate the funding to a given locality or a state under this Act as well as the funding of those programs specifically designed for handicapped children under the Vocational Education Act; (2) authorizes such sums as may be necessary for the U.S. Commissioner to award grants to pay all or part of the cost of altering existing buildings and equipment to eliminate architectural barriers in educational facilities; and (3) requires that students be served in the least restrictive environment.

Recent amendments to the Vocational Education Act of 1973, Title II of the Education Amendments of 1976, require each state to assure that "use of funds expended for the handicapped will be consistent with the State plan submitted under the Education of the Handicapped Act."

The Equal Education Opportunities Act and Amendments passed by the North Carolina General Assembly mandates that "comprehensive programs and services" be provided to all students, including the handicapped.

## The Mainstreaming Approach

Mainstreaming is an important and a potentially dangerous educational innovation (Paul, Turnbull and Cruickshank, 1977). It is important because it suggests providing for full participation by handicapped students in the educational system. It is dangerous because, without an understanding of the changes or the complexity of changes the innovation requires, it could nullify the recent advances made in providing educational services for handicapped children.

Mainstreaming involves optimizing the "fit" between students and their environment to facilitate learning and skill development. For the educator this involves much more than the integration of handicapped students into regular classes. It involves integrating major forces that have been, in many respects, philosophically, politically, programmatically and financially parallel or separate (Paul, et al., 1977).

The following explanation adapted from the Council for Exceptional Children (1975) serves to clarify the concept of mainstreaming.

Mainstreaming is:

- providing the most appropriate education for each student in the least restrictive setting.
- looking at the educational needs of students instead of clinical or diagnostic labels such as mentally handicapped, learning disabled, physically handicapped, or hearing impaired.
- looking for and creating alternatives that will help academic and vocational educators serve students with learning or adjustment problems in the regular setting.
- uniting the skills of academic, vocational, and special education so that all students may have equal educational opportunity.

Mainstreaming is not:

- wholesale return of all exceptional students in special classes or programs to regular classes.
- permitting students with special needs to remain in regular classrooms without the support services that they need.
- ignoring the need of some students for a more specialized program than can be provided in the regular vocational education program.
- less costly than serving students in special self-contained classrooms or programs.

Perhaps most important of all, mainstreaming is a fact for an increasingly large number of school systems. It is viewed by most administrators as a viable alternative for serving handicapped students and meeting the requirements of the legislation. However, the means and procedures useful for implementing mainstreaming require continued investigation. This project addresses one useful set of procedures.

## Objectives

The specific objectives of the project were the following:

a) Design and develop a new needs assessment and planning procedure specifically for use by local vocational education administrators to: (1) identify needs and barriers to mainstreaming; (2) develop strategies for meeting the identified needs and overcoming the barriers; and (3) plan successfully for strategy implementation.

b) Prepare a detailed instruction manual to guide application of the needs assessment and planning procedure at the local education agency level.

## II. PROCEDURES

### Assumptions

The study accepted the view that (a) mainstreaming methodology was being emphasized for delivering vocational education services to handicapped children, and (b) an efficient needs assessment procedure and strategy planning format could be developed for use in identifying needs and to reduce those barriers in each program. Additional assumptions were as follows:

1) career and vocational education programs are critical for every person in an attempt to become a contributing member of society; this is especially true for the handicapped;
2) mainstreaming is a complex philosophical, administrative and technical problem in the ecology of public schools;
3) productive mainstreaming activity can most effectively be developed as a part of the organizational style and values of local vocational education programs;
4) the perceptions of the teachers, principal and other staff in each school are the primary sources of information about what the problems in implementing mainstreaming will be/are, i.e., needs and barriers that exist or those that are perceived to exist;
5) barriers to mainstreaming must be reduced if it is to be successfully implemented; and,
6) in-service training curriculum must be based on perceived needs and barriers gathered from those who are involved.

### Review of the Related Literature

In the design and development of the needs assessment and planning procedure, project staff conducted a review of related literature to identify important procedural components and process techniques which have been suggested by others or identified through research. The literature review focused on the following key areas:

1) needs assessment,
2) barrier identification,
3) program planning,
4) program evaluation,

5) general topic of mainstreaming
6) the handicapped and vocational education, and
7) related areas and issues.

Within the last several years, a large number of reasearch and position papers have appeared in the literature dealing with mainstreaming and the handicapped in vocational education. This information was accessed and reviewed in each of the above areas, particularly as these topics relate to the content areas of mainstreaming, vocational education and educating the handicapped. The reviewed information provided useful background information and strategy suggestions.

Survey of Special Education Directors

The needs assessment and planning procedure is directed to vocational education directors and planners at the local education agency level. In providing vocational education services to the handicapped student population, the importance of cooperation and coordination between vocational education and special education has been recognized (Tomlinson and Albright, 1977; Hughes, 1978; Rice, 1978). At the local education agency level, special education has the major experience, expertise and resources for providing instructional services to handicapped students. Determination of how special education expertise and resources at the local level could be best utilized by vocational education was examined from the perspective of the local special education director.

Interviews were conducted with special education directors in five school systems representing large, small, urban and rural systems (Ortman, 1978). From the interviews conducted, it was found that several strategies had been/were being employed to maximize cooperation and coordination which were successful. These strategies included: (1) special personnel, e.g., special education teacher to assist vocational education teachers and vice versa; (2) joint in-service activities; (3) joint and/or matching funding; (4) inclusion of vocational education objectives in the individual education plans (IEPs) of handicapped students, (5) provision/sharing of teaching materials and supplies, (6) joint development of

curriculum materials, and (7) development and maintenance of open lines of communication between local directors of vocational education and special education. The special education directors interviewed in the survey saw no real problems in cooperating and coordinating their programs with vocational education. In fact, the majority were already doing so. This finding was consistent with findings from an earlier study which examined the relationship between vocational education and special education at the local level (Olympus Research Corporation, 1974).

It was concluded from findings in the survey that special education resources and expertise were being shared with vocational education; and that special provisions in the needs assessment and planning procedure were not required. However, it was suggested that special education be represented on the local planning committee.

Compilation of Available Resources

As a supplement to the needs assessment and planning procedure, and in particular for the strategy implementation step of the process, a compilation of existing resources was completed. Resources available to local vocational education directors include regional education materials centers, technical assistance systems and resource materials such as books, journal articles, reports, etc. The compilation was organized by three major groupings: (1) organizations, institutions and agencies; (2) instructional materials; and (3) planning materials.

## III. RESULTS

The major result of the project is the needs assessment and planning procedure. It has been fully described in a separate volume of this final report in the form of a manual to guide its use by vocational education administrators. The manual has been written in a style and designed in such a format to facilitate its utilization by local directors. Practical approaches, rather than theoretical issues, have been emphasized.

Conceptually, the procedure is based on a program planning and evaluation model described by Gallagher, Surles and Hayes (1973) and has four distinct components. The four components include the following: (1) needs assessment and identification of barriers, (2) development of strategies to meet needs and overcome barriers, (3) implementation of planned strategies, and (4) evaluation.

The needs assessment and identification of barriers phase incorporates the nominal group technique process (Delbecq, Van de Ven and Gustafson, 1975). The nominal group technique process was derived from social-psychological studies of decision conferences, management science studies of aggregating group judgments, and social work studies of problems surrounding citizen participation in program planning. The process involves a structured group meeting which follows a prescribed sequence of problem-solving steps: (1) silent generation of ideas in writing, (2) round-robin feedback from group members to record each idea in a terse phrase on a flip chart, (3) discussion of each recorded idea for clarification and evaluation, and (4) individual voting on priority ideas with the group decision being mathematically derived through rank-ordering or rating.

The rationale for selecting this particular technique for the needs assessment and barriers identification phase is its many advantages over interacting groups.

The nominal group process includes a number of characteristics which facilitate decision-making performance: (1) low variability among group members, (2) a balanced concern for social-emotional group maintenance roles

and performance of task instrumental roles, (3) the silent independent generation of ideas and the round-robin procedure results in a high quantity of ideas, (4) search behavior is proactive, characterized by high task-centered group effort, (5) the structured process forces equality of participation among members, and (6) nominal group meetings tend to conclude with a perceived sense of closure, accomplishment and interest in future phases of problem-solving (Delbecq, Van de Ven and Gustafson, 1975, pp. 33 and 34).

The procedure includes the utilization of a local planning committee for establishing goals and objectives, generating alternative strategies, selecting among alternatives, strategy implementation, and evaluation. The importance of a local planning committee to involve key persons within the school or school system has been discussed by Paul, Turnbull and Cruickshank (1977). The manual describing the procedures includes specific suggestions for committee membership. Two key members are the school principal and the special education director. Paul (1974), in an unpublished evaluation of mainstreaming in two large junior high schools in an urban center, noted the importance of the principal's support in the total ecology of the mainstreaming activity. The principal's role was central in administratively orchestrating as well as psychologically facilitating the "fit" between the mainstreaming goals and the political, economic, social and educational readiness in the school to implement those goals.

Payne and Murray (1974) compared attitudes of urban and suburban principals toward the integration of handicapped children into regular classrooms. They concluded that the suburban principal is more willing to assume the integration role than the urban principal.

Tomlinson and Albright (1977) pointed out the need for an inter-disciplinary approach between special education and vocational education in implementing the P.L. 94-142 requirement for individual education plans. Hughes (1978) identified an overriding need for program coordination between special and vocational education at the local level. Ortman (1978), in a small survey of special education directors, found that cooperation and

coordination practices were either in effect or being planned. It seems almost imperative for the vocational education administrator to include the local director of special education on the local planning committee.

In the steps of the process for generating and selecting among alternative strategies, brainstorming techniques and a modified version of Force Field Analysis (Lewin, 1951) have been proposed. Force Field Analysis was developed out of field theory, which recognizes that every activity is in a sphere of influencing forces (field) working either in the interest or disinterest of that activity. The school/school system is such a field in which mainstreaming will be implemented. The technique provides a structured way in which school personnel, i.e., members of the local planning committee, can identify the "forces for" and the "forces against" particular alternative strategies for implementing mainstreaming.

The appendices to the administrator's manual provide additional background information on mainstreaming, a quick-review summary of the nominal group technique process, and a list of resources available to local vocational education directors which will assist their implementation of the mainstreaming approach.

## IV. CONCLUSIONS

A number of administrative issues involving vocational education administrators and teachers are related to implementation of the mainstreaming approach. These include: (1) the tendency toward simplification or equating the concept simply with the relocation of students (Paul, 1977); (2) bridging the regular--special-vocational education gap in terms of philosophical, informational, role and status issues (Dubrow, 1976); (3) bringing the parents of both special needs students and other students into the delivery system and removing the myths and fears that either group might harbor (Paul, 1977); (4) the allocation and reallocation of money, materials, duties, skills and responsibilities with equity and in accordance with some well thought-out plan to achieve the goals; (5) planning--both articulation and implementation--of a specific campaign to accomplish goals and objectives; (6) facilitating communication between and among the role participants and agencies involved in the delivery of services; and (7) making decisions regarding any of the above questions and providing support--whether through advocacy or adherence to principles or procedures--to accomplish the agreed-upon objectives.

Appropriate attention to these and other issues will require careful planning and skillful administration from local directors of vocational education. The needs assessment and planning procedure designed and developed in this project provides a carefully thought-out, empirically-based approach for addressing these issues. Utilization of the procedure by local administrators should help to assure successful implementation of the mainstreaming approach.

## BIBLIOGRAPHY


Council for Exceptional Children. What is mainstreaming? Exceptional Children, 1975, 42, 174.

Delbecq, A. L., A. H. Van de Ven and D. H. Gustafson. Group Techniques for Program Planning. Glenview IL: Scott, Foresman & Co., 1975.

Dubrow, Bernard. "Urban Mainstreaming Model." Unpublished presentation at the University of Connecticut Technical Assistance Conference, Miami, Florida, February 4-6, 1976.

Gallagher, J., R. Surles and A. Hayes. Program planning and evaluation: First chance for children, Vol. 2. Chapel Hill NC: Technical Assistance Development System, 1973.

General Assembly of North Carolina. An Act to Provide for a System of Educational Opportunities for All Children Requiring Special Education. House Bill 824, 1977 Session, Chapter 927. Raleigh NC, 1977.

Hughes, J. H. Mainstreaming the handicapped in preparatory occupational education programs in North Carolina. Chapel Hill NC: System Sciences, Inc., 1978.

Lewin, K. Field theory in social science. New York: Harper, 1951.

Olympus Research Corporation. An assessment of vocational education programs for the handicapped under Part B of the 1968 amendments to the Vocational Education Act. Salt Lake City: Olympus Research Corporation, 1974.

Ortman, G. R. Approaches for maximizing cooperation and coordination between vocational education and special education at the local level. (Unpublished consultant's report) March 20, 1978.

Paul, J. L. An evaluation of a project to implement mainstreaming of handicapped students in a large urban school system. (Unpublished report) 1974.

_____. "Mainstreaming Emotionally Disturbed Children." In Proceedings of the Connecticut Conference on Mainstreaming Emotionally Disturbed Children. Storrs CT: University of Connecticut, January 1977.

Paul, J. L., A. P. Turnbull and W. M. Cruickshank. Mainstreaming: A practical guide. Syracuse NY: Syracuse University Press, 1977.

Payne, R., and C. J. Murray. Principal's attitudes toward integration of the handicapped. Exceptional Children, 1974, 41, 123-125.

Rice, E. Statewide assessment/evaluation of occupational education programs for disadvantaged and handicapped students. Chapel Hill NC: System Sciences, Inc., 1978.

Tomlinson, R., and L. Albright. P.L. 94-142 is coming! Are you ready? School Shop, 1977, 36, 6, 28-31.

U.S. Congress. Education Amendments of 1976. P.L. 94-482. Washington DC: U.S. Government Printing Office, 1976.

_____. Education for All Handicapped Children Act of 1975. P.L. 94-142. Washington DC: U.S. Government Printing Office, 1975.